

**Notice of Allowability**

Application No.

10/710,863

Examiner

Faye Boosalis

Applicant(s)

JIANG ET AL.

Art Unit

2884

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to submission of 5 September 2006.
2. ☒ The allowed claim(s) is/are 1-4,6-27 and 29-34.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

## EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

### ***Comment on Submissions***

1. This communication is responsive to submissions 5 September 2006.

### ***Allowable Subject Matter***

2. Claims 1-4, 6-27 and 29-34 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 1, prior art does not disclose or fairly suggest a scintillator array for use in a CT imaging system, comprising: a glass compound, containing plurality of reflective particles and compound including Chloride, disposed over and between the plurality of projecting elements which emit light in response to receiving x-rays.

The examiner notes that while it is known in the art for a scintillator array for use in a CT imaging system, comprising: an x-ray absorbing layer (16) comprising x-ray absorbing material disposed in inter-scintillator regions and a scintillation radiation reflecting layer (18), extending over the top of the scintillator pixels, made of a scintillation radiation reflecting material (see for example *Venkataramani et al – US 6,519,313 – See Figs. 1, 3 and 4, and col. 3, lines 41-59*), the prior art does not suggest the glass compound containing a plurality of reflective particles disposed over and between plurality of projecting elements.

Regarding independent claim 12, prior art does not disclose or fairly suggest a method for manufacturing a scintillator array for use in a CT imaging system, comprising: a glass compound, containing plurality of reflective particles with a plurality

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of reflective particles in a fluid to obtain a mixture; step of removing the fluid from the mixture and disposing the fluidless mixture over and between a plurality of projecting elements disposed proximate one another.

The examiner notes that while it is known in the art of a method for manufacturing a scintillator array for use in a CT imaging system, dispersing a powdered metal or metal compound within a liquid to form a precursor mix (i.e. slurry), and impregnated into the inter-scintillator region under pressure or vacuum and then solidified under heat (see for example *Venkataramani et al* – US 6,519,313 – col. 5, lines 38-57 and col. 7, lines 31-39), the prior art does not suggest removing fluid from a mixture of particles of a glass compound and reflective particles in the fluid to obtain a fluidless mixture, applying a pressure to the fluidless mixture and then disposing the fluidless mixture over and between a plurality of projecting elements.

Regarding independent claim 23, prior art does not disclose or fairly suggest a detector module for use in a CT imaging system, comprising: a glass compound, containing plurality of reflective particles and compound including Chloride, disposed over and between the plurality of projecting elements which emit light in response to receiving x-rays.

The examiner notes that while it is known in the art for a scintillator array for use in a CT imaging system, comprising: an x-ray absorbing layer (16) comprising x-ray absorbing material disposed in inter-scintillator regions and a scintillation radiation reflecting layer (18), extending over the top of the scintillator pixels, made of a scintillation radiation reflecting material (see for example *Venkataramani et al* – US

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6,519,313 – See Figs. 1, 3 and 4, and col. 3, lines 41-59) and a photodiode array configured to receive light emitted from the scintillator array and to generate electrical signals responsive (col. 5, lines 58-64 and col. 6, lines 61-64), the prior art does not suggest the glass compound containing a plurality of reflective particles disposed over and between plurality of projecting elements.

The remaining claims 2-4, 6-11, 13-22, 24-27 and 29-34 are allowable based on its dependency.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

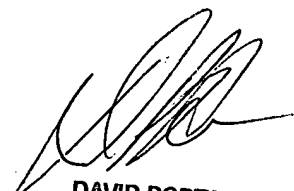
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Boosalis whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FB



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